

***FlyBy Math™* Alignment**
South Dakota Mathematics Content Standards
May 17, 2004

Algebra Standards

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
9-12.A.2.2A. (Application) Determine the solution of systems of equations and systems of inequalities.	<p>--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.</p> <p>--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.</p> <p>--Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.</p>

Indicator 3: Interpret and develop mathematical models.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
9-12.A.3.2A. (Synthesis) Create formulas to model relationships that are algebraic, geometric, trigonometric, and exponential.	<p>--Use the distance-rate-time formula to predict and analyze aircraft conflicts.</p> <p>--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.</p>

Statistics and Probability Standards

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

Standard and Supporting Skills	<i>FlyBy Math™</i> Activities
9-12.S.1.2A. (Evaluation) Analyze and evaluate graphical displays of data.	<p>--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.</p> <p>--Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.</p>